COMPLETE LISTING OF ALL CLAIMS
WITH CURRENT STATUS AND MARKINGS TO SHOW CHANGES

1. (currently amended) A method of ~~evaluating the compositional characteristics of an entire corn plant~~ predicting the compositional characteristics of a corn plant population, the method comprising:

(a) selecting a population of mature corn plants to be evaluated;

(b) selecting a limited number of representative plants from the population based on visually surveyed characteristics;

(c) harvesting the representative plants;

(d) grinding the representative plants into a homogeneous mixture;

(e) analyzing a sample of the homogeneous mixture in a near infrared spectrometer; and

(f) comparing the analysis with an existing correlation between near infrared analyses and wet-chemistry tested nutritional compositional characteristics ~~to predict the compositional characteristics of the corn plant population~~.

2. (currently amended) The method of claim 1 wherein at least three representative plants from the population are selected ~~based on visually surveyed characteristics~~.

3. (original) The method of claim 1 wherein the representative plants are harvested at physical maturity.

4. (original) The method of claim 1 wherein the representative plants are ground in a bowl grinder.

5. (original) The method of claim 1 wherein the sample is analyzed by scanning at a plurality of locations.